

WHAT IS CLAIMED IS:

1. A leading wave position detecting unit for detecting a leading wave position in a delay profile,  
5 said leading wave position detecting unit comprising:  
time space measuring means for measuring time spaces between sampled values of a delay profile sampled along a delay time axis;  
leading position detecting means for detecting a  
10 position of a sampled value immediately after a maximum time space from among time spaces measured by said time space measuring means as a leading position; and  
leading wave position detecting means for detecting an initial peak position of the sampled  
15 values after the leading position detected by said leading position detecting means as a leading wave position.
2. The leading wave position detecting unit as claimed  
20 in claim 1, further comprising:  
noise suppressing means for suppressing noise of the delay profile, wherein  
said time space measuring means measures the time spaces between the sampled values of the delay profile  
25 with its noise suppressed by said noise suppressing means.

3. The leading wave position detecting unit as claimed in claim 1, wherein the sampled values are received power values.

5 4. A receiver comprising:

time space measuring means for measuring time spaces between sampled values of a delay profile sampled along a delay time axis;

leading position detecting means for detecting a  
10 position of a sampled value immediately after a maximum time space from among time spaces measured by said time space measuring means as a leading position; and

leading wave position detecting means for  
detecting an initial peak position of the sampled  
15 values after the leading position detected by said leading position detecting means as a leading wave position, wherein

the delay profile is a delay profile in terms of paths generated by despreading and dividing, at a  
20 receiving side, a transmitted signal spread using a spreading code.

5. A leading position detecting unit for detecting a leading position in a delay profile, said leading  
25 position detecting unit comprising:

time space measuring means for measuring time spaces between sampled values of a delay profile

sampled along a delay time axis; and

leading position detecting means for detecting a position of a sampled value immediately after a maximum time space from among time spaces measured by said time space measuring means as a leading position.

6. A leading wave position detecting method for detecting a leading wave position in a delay profile, said leading wave position detecting method comprising:

a time space measuring step of measuring time spaces between sampled values of a delay profile sampled along a delay time axis;

a leading position detecting step of detecting a position of a sampled value immediately after a maximum time space from among time spaces measured in said time space measuring step as a leading position; and

a leading wave position detecting step of detecting an initial peak position of the sampled values after the leading position detected in said leading position detecting step as a leading wave position.

7. The leading wave position detecting method as claimed in claim 6, further comprising:

a noise suppressing step of suppressing noise of the delay profile, wherein

said time space measuring step measures the time spaces between the sampled values of the delay profile with its noise suppressed by said noise suppressing step.

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8. The leading wave position detecting method as claimed in claim 6, wherein the sampled values are received power values.

10 9. A leading position detecting method for detecting a leading position in a delay profile, said leading position detecting method comprising:

a time space measuring step of measuring time spaces between sampled values of a delay profile

15 sampled along a delay time axis; and

a leading position detecting step of detecting a position of a sampled value immediately after a maximum time space from among time spaces measured by said time space measuring step as a leading position.